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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,023	01/21/2004	Bruce Owen Griffin	4-23009/P1/CGC 2177	3993
62968 7590 12/24/2008 HUNTSMAN INTERNATIONAL LLC LEGAL DEPARTMENT 10003 WOODLOCH FOREST DRIVE THE WOODLANDS, TX 77380				
EXAMINER KHAN, AMINA S				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
12/24/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/762,023

**Applicant(s)**

GRIFFIN ET AL.

**Examiner**

AMINA KHAN

**Art Unit**

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/8/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2 and 4-24 is/are pending in the application.
- 4a) Of the above claim(s) 2, 16 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-15 and 18-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 8, 2008 has been entered.
2. Claims 1,2 and 4-24 are pending. Claim 3 has been cancelled. Claims 2,16 and 17 have been withdrawn from consideration due to a non-elected invention. Claims 1,4,6 and 24 have been amended.
3. All previous rejections are withdrawn in view of applicant's amendments to the claims.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1,4,9-12,18-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pichler et al. (WO 02/059216) in view of Himeno et al. (US 5,332,404).

Pichler et al. teach dye compositions comprising dyes of the instantly claimed formulas (I),(II),(IV), (Xa and Xb), (VIIa+VIIb) and (VIIC+VIId) (page 3, dyes 4,5; page 4, dyes 6,7; page 10, dye 10, page 11, dye 11, 14,15; page 12, dye 17). Pichler et al. further teach that the amount of the individual dyes may be used within wide limits such as 95:5 or 5:95 parts by weight (page 5, paragraph 3). Pichler further teaches dyeing and printing textiles using a thermosol process in the presence of dispersants and water (page 9, paragraphs 2-4). Pichler et al. teach dyeing hydrophobic synthetic materials (abstract).

Pichler et al. do not teach the dyes of formula (IX).

Himeno et al. teach dye compositions comprising dyes of the instantly claimed formulas (I),(IV), (Xa and Xb) and (IX) (columns 4 and 5; columns 27 and 28, dyes 76; columns 25 and 26, dye 69; column 23 and 24, dye 65). Himeno et al. further teach the blending ratios of the dyes (columns 3-5). Himeno further teaches dyeing and printing hydrophobic textiles by thermosol methods in the presence of dispersants, water and UV absorbers (column 8, lines 35-68; column 9, lines 10-15). Example 60 indicates percentages of dispersants, UV absorbers and water (column 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods and compositions of Pichler by incorporating the instantly claimed dyes of formula (IX) from the teachings of Himeno because

Himeno and Pichler et al. are both directed to treating similar fabrics by similar thermosol methods for the similar benefit of producing light fast and strong color dyeings. One of ordinary skill would have been motivated to modify the teachings of Pichler to maximize lightfastness and color strength of dyeings of fabrics absent unexpected results.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pichler et al. (WO 02/059216) in view of Himeno et al. (US 5,332,404) and further in view of Haruta et al. (US 5,718,216).

Pichler et al. and Himeno et al. are relied upon as described in paragraph 5.

Pichler et al. and Himeno et al. do not teach the instantly claimed printing methods.

Haruta et al., in the analogous art of textile printing, teach printing polyester with any disperse dye by applying the paste to textiles, fixing with high temperature steaming or thermosol at 160-180°C and 190-230°C, respectively (columns 9 and 10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods and compositions of Pichler and Himeno by incorporating the printing methods of Haruta et al. because Haruta et al. teach these methods produce printings with great color depth, sufficient brightness and sharpness without bleeding (abstract). One of ordinary skill would have been motivated to combine the teachings of the references absent unexpected results.

7. Claims 13,14,15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pichler et al. (WO 02/059216) in view of Himeno et al. (US 5,332,404) and further in view of Tittmann et al. (US 5,871,669).

Pichler et al. and Himeno et al. are relied upon as described in paragraph 5.

Pichler et al. and Himeno et al. do not teach the instantly claimed triazine absorbers at the claimed percentages.

Tittmann et al., in the analogous art of textile printing, teach printing polyester by adding the instantly claimed stabilizers from 0.1-10% by weight of the printing paste (column 21, lines 40-45) for the benefits of good lightfastness.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods and compositions of Pichler and Himeno by incorporating the stabilizers of Tittmann et al. because Tittmann et al. teach these methods produce printings with high lightfastness. One of ordinary skill would have been motivated to combine the teachings of the references absent unexpected results.

8. Claims 5,8 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pichler et al. (WO 02/059216) in view of Himeno et al. (US 5,332,404) and further in view of Loeffler et al. (US 5,403,363).

Pichler et al. and Himeno et al. are relied upon as described in paragraph 5.

Pichler et al. and Himeno et al. do not teach the dyes of formula (XIV) or (XIIa-c).

Loeffler et al., in the analogous art of textile dyeing, teach dyeing polyester with dyes of the instantly claimed formula (XIV) and (XIIa-c), for the benefits of high color

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strength and dye lightfastness (column 1; column 14, lines 45-67; column 12, lines 30-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods and compositions of Pichler and Himeno by incorporating the dyes of Loeffler et al. because Loeffler et al. teach these methods produce dyeings with high color strength and dye lightfastness. Regarding the mixture of the dyes of formulas (XIIa-c), since Loeffler et al. does not specify the specific isomer and mixtures are permitted, nothing unobvious is seen in incorporating mixtures of the isomers since dyes of similar structure suggest one another and would be expected to possess similar properties. One of ordinary skill would have been motivated to combine the teachings of the references absent unexpected results.

9. Claims 6 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pichler et al. (WO 02/059216) in view of Himeno et al. (US 5,332,404) and Loeffler et al. (US 5,403,363) and further in view of Sutter et al. (WO 02/051941).

Pichler et al., Himeno et al. and Loeffler et al. are relied upon as described in paragraph 8.

Pichler et al., Himeno et al. and Loeffler et al. do not teach the dyes of formula (VIII).

Sutter et al., in the analogous art of textile dyeing, teach dyeing hydrophobic materials with dyes of the instantly claimed formula (VIII), for the benefits of high wet

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fastness and dye lightfastness (page 5, dye 13; page 8, paragraph 3; page 9, paragraph 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods and compositions of Pichler, Himeno and Loeffler by incorporating the dyes of Sutter et al. because Sutter et al. teach these methods produce dyeings with high wet fastness and dye lightfastness. One of ordinary skill would have been motivated to combine the teachings of the references absent unexpected results.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pichler et al. (WO 02/059216) in view of Himeno et al. (US 5,332,404) and further in view of Hall (US 5,759,212).

Pichler et al. and Himeno et al. are relied upon as described in paragraph 5.

Pichler et al. and Himeno et al. do not teach the dyes of formula (XXII).

Hall, in the analogous art of textile dyeing, teach dyeing polyester with dyes of the instantly claimed formula (XXII), for the benefits of high wet fastness and dye lightfastness (page 5, dye 13; page 8, paragraph 3; page 9, paragraph 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods and compositions of Pichler and Himeno by incorporating the dyes of Hall because Hall teaches these methods produce dyeings with high wet fastness and dye lightfastness. One of ordinary skill would have been motivated to combine the teachings of the references absent unexpected results.



***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMINA KHAN whose telephone number is (571)272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M Douyon/  
Primary Examiner, Art Unit 1796

/Amina Khan/  
Examiner, Art Unit 1796  
December 16, 2008